THAT WHICH IS CLAIMED IS

1. A durable waterproof breathable composite fabric comprising an outer shell fabric layer formed of a woven or knitted fabric having exterior and interior surfaces, and a microporous barrier layer positioned adjacent the interior surface of said outer fabric and comprising a thermoplastic polymer film containing a mechanical pore-forming agent that renders the film microporous and permeable to moisture vapor.

2. The composite fabric of Claim 1, wherein the outer shell fabric layer is laminated to the microporous barrier layer.

3. The composite fabric of Claim 2, wherein the process of lamination is selected from the group consisting of: thermal bonding, ultra-sonic bonding, hot melt adhesive bonding, pressure sensitive adhesive bonding, solvent based adhesive bonding and powder-bond adhesive bonding.

4. The composite fabric of Claim 2, wherein the outer shell fabric layer and the microporous barrier layer are laminated at discrete spaced apart locations.

5. The composite fabric of Claim 4, wherein the percentage area of adhesion is between 10% and 100%.

6. The composite fabric of Claim 1, wherein the thermoplastic polymer film is a free-standing film.

7. The composite fabric of Claim 1, wherein the thermoplastic polymer film is adhered to a nonwoven support substrate.

8. The composite fabric of Claim 7, wherein the support substrate is a spunbond nonwoven fabric.

9. The composite fabric of Claim 8, wherein the spunbond nonwoven fabric is comprised of bicomponent fibers.

10. The composite fabric of Claim 1, wherein the microporous barrier layer is a thermoplastic polymer film extrusion coating applied directly to the interior surface of said outer shell fabric.

11. The composite fabric of Claim 1, wherein the moisture vapor transmission rate (MVTR) of the composite fabric is at least 100 $g/m^2 \cdot 24hr.$ when measured by ASTM E96 procedure B at 73°F and 50% relative humidity.

12. The composite fabric of Claim 1, wherein the outer layer of woven or knitted fabric is comprised of nylon, polyester, acrylic, cotton, rayon, acetate, polyamides, polypropylene, polyethylene, flame retardant fibers and/or blends thereof.

13. The composite fabric of Claim 12, wherein the outer layer of woven or knitted fabric is a dimensionally stabilized fabric.

14. The composite fabric of Claim 12, wherein the outer layer of woven or knitted fabric includes a waterproof surface treatment.

15. The composite fabric of Claim 12, wherein said fabric has a fabric count in at least one fabric direction of 25 yarns per inch or greater.

16. The composite fabric of Claim 1, including an inner layer of a woven, knitted, nonwoven or foamed material laminated to said microporous barrier layer.

17. The composite fabric of Claim 1, wherein the microporosity of the intermediate layer is produced via stretching the mechanical pore-forming agent filled thermoplastic polymer film.

18. A durable waterproof breathable composite fabric comprising a closely woven or knitted outer shell fabric having exterior and interior surfaces, and a microporous barrier layer laminated to the interior surface of said outer shell fabric, said microporous barrier layer comprising a polyolefin polymer film

layer filled with a mechanical pore-forming agent that renders the polyolefin film microporous and permeable to moisture vapor.

19. The composite fabric of Claim 18, wherein said outer shell fabric is pre-shrunk to impart dimensional stability.

20. The composite fabric of Claim 18, wherein said outer shell fabric is chemically treated to impart dimensional stability.

21. The composite fabric of Claim 18, wherein the outer shell fabric and the microporous barrier layer are of equal dimensional stability after laundering thus rendering the composite shrink resistant.

22. The composite fabric of Claim 18, wherein the microporous barrier layer includes a spunbond nonwoven fabric supporting substrate bonded to said polyolefin polymer film layer.

23. A durable waterproof breathable composite fabric comprising an outer layer formed of a woven fabric having exterior and interior surfaces, a microporous barrier layer positioned adjacent the interior surface of said outer fabric and comprising a nonwoven fabric supporting substrate formed of polyolefin fibers or filaments and a polyolefin polymer film layer carried by and adhered to said nonwoven fabric supporting substrate, the polyolefin polymer film layer containing a mechanical pore-forming agent that renders the film microporous and permeable to moisture vapor, a moisture vapor permeable adhesive layer bonding one surface of said microporous barrier layer to the interior surface of said outer layer, and an inner fabric layer positioned adjacent the opposite surface of said microporous barrier layer and secured thereto.

24. The composite fabric of claim 23, wherein the inner fabric layer is secured to said microporous barrier layer by an adhesive.

25. The composite fabric of claim 23, wherein the inner fabric layer is secured to said microporous barrier layer by stitching along peripheral edge portions of the composite fabric.

26. The composite fabric of claim 23, wherein the moisture vapor permeable adhesive layer comprises a discontinuous adhesive layer.

27. The composite fabric of claim 23, wherein the moisture vapor permeable adhesive layer comprises a power bond adhesive.

28. A method of making a waterproof, breathable composite fabric which comprises forming a microporous barrier layer from a thermoplastic polymer film containing a mechanical pore-forming agent that renders the film microporous and permeable to moisture vapor, and laminating the microporous barrier layer to an outer shell fabric layer formed of a woven or knitted fabric.

29. The method of Claim 28, wherein the step of forming a microporous barrier layer comprises extruding a thermoplastic polymer film containing said mechanical pore-forming agent, and stretching the film to impart microporosity.

30. The method of Claim 29, wherein the film is extruded as a free standing film.

31. The method of Claim 29, wherein the film is extrusion coated onto a nonwoven fabric supporting substrate.

32. The method of Claim 29, including a further step of laminating the microporous film to an additional interior layer of woven, knitted, nonwoven, or foamed materials.

33. The method of Claim 29, wherein the stretching is achieved via incremental stretching, intermeshing, inter-digitization, mono-axial stretching, biaxial stretching, compression molding, vacuum molding, or cold rolling.

34. The method of Claim 29, wherein the process of lamination is selected from the group consisting of thermal lamination, ultra-sonic lamination, hot melt adhesive bonding, pressure sensitive adhesive bonding, solvent based adhesive bonding and powder-bond adhesive bonding.

35. The method of Claim 28, wherein the exterior woven or knitted shell fabric layer and the microporous barrier layer are laminated at discrete and spaced apart locations.

36. The method of Claim 35, wherein the percentage area of adhesion is between 10% and 100%.

37. The method of Claim 28, including the step of pre-shrinking the outer shell fabric layer to improve the dimensional stability of the composite fabric.

38. The method of Claim 28, including the step of chemically treating the outer shell fabric layer to improve the dimensional stability of the composite fabric.

39. The method of Claim 28, wherein the composite layers are of equal dimensional stability after laundering thus rendering the composite shrink resistant.

40. The method of Claim 28, wherein the composite layers are of unequal dimensional stability after laundering thus allowing the final composite to pucker after laundering.

41. A method of making a waterproof, breathable composite fabric which comprises extruding a thermoplastic polyolefin resin composition containing a mechanical pore-forming agent to form an extruded film, allowing the extruded film to cool and solidify, stretching the film to produce microscopic pores throughout the film that render the film permeable to moisture vapor, and

laminating the microporous barrier layer to an outer shell fabric layer formed of a woven or knitted fabric .

42. The method of Claim 41, wherein the extruding step comprises extruding an unsupported free-standing film of the thermoplastic polyolefin resin composition and mechanical pore-forming agent, and the stretching step comprises stretching the film uniaxially or biaxially.

43. The method of Claim 41, wherein the extruding step comprises extrusion coating a film of the thermoplastic polyolefin resin composition and mechanical pore-forming agent onto the surface of a nonwoven fabric supporting substrate and forming a composite of the film and substrate, and the stretching step comprises stretching the composite uniaxially or biaxially.

44. The method of Claim 41, wherein the laminating step comprises applying a thermoplastic powder adhesive between the microporous barrier layer and the outer shell fabric layer, heating the powdered adhesive to above its softening point, and applying pressure to combine the layers.

45. The method of Claim 41, wherein the laminating step comprises applying a hot-melt adhesive between the microporous barrier layer and the outer shell fabric layer and applying pressure to combine the layers.

46. The method of Claim 41, wherein the laminating step comprises applying a solvent-based adhesive between the microporous barrier layer and the outer shell fabric layer, and applying pressure to combine the layers.